

10/667,590

(FILE 'HOME' ENTERED AT 09:41:38 ON 14 JUN 2004)

FILE 'REGISTRY' ENTERED AT 09:41:51 ON 14 JUN 2004
L1 STRUCTURE uploaded

=> d 11
L1 HAS NO ANSWERS
L1 STR

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Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 09:42:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 64 TO ITERATE

100.0% PROCESSED 64 ITERATIONS 8 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 801 TO 1759
PROJECTED ANSWERS: 8 TO 329

L2 8 SEA SSS SAM L1

=> s 11 full
FULL SEARCH INITIATED 09:42:30 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1279 TO ITERATE

100.0% PROCESSED 1279 ITERATIONS 201 ANSWERS
SEARCH TIME: 00.00.01

L3 201 SEA SSS FUL L1

=> fil caplus
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ENTRY SESSION
FULL ESTIMATED COST 155.42 155.63

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FILE COVERS 1907 - 14 Jun 2004 VOL 140 ISS 25
FILE LAST UPDATED: 13 Jun 2004 (20040613/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s 13/prep
      125 L3
      3158613 PREP/RL
L4      81 L3/PREP
      (L3 (L) PREP/RL)

=> s 14 and magnesium catalyst
      403781 MAGNESIUM
      657973 CATALYST
      1337 MAGNESIUM CATALYST
      (MAGNESIUM(W)CATALYST)
L5      0 L4 AND MAGNESIUM CATALYST

=> s 14 and magnesium
      403781 MAGNESIUM
L6      1 L4 AND MAGNESIUM

=> d bib abs

L6  ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
AN  2001:290456 CAPLUS
DN  135:92710
TI  Synthesis of Ferrocenyl Alkenes, Dienes, and Enynes via Samarium Diiodide Promoted Tandem Addition and Dehydration of Ferrocenyl Carbonyls with Halides
AU  Jong, Shean-Jeng; Fang, Jim-Min
CS  Department of Chemistry, National Taiwan University, Taipei, 106, Taiwan
SO  Journal of Organic Chemistry (2001), 66(10), 3533-3537
    CODEN: JOCEAH; ISSN: 0022-3263
PB  American Chemical Society
DT  Journal
LA  English
OS  CASREACT 135:92710
AB  A practical method for preparation of ferrocenyl alkenes, dienes, and enynes from ferrocenyl carbonyls was explored. A one-pot operation using samarium diiodide to promote the condensation reactions of ferrocenecarboxaldehyde, acetylferrocene, benzoylferrocene, and butanoylferrocene with benzyl bromides, allyl bromide, propargyl bromide, and 1-bromo-3-chlorobutane gave the olefinic products in very high yields. The condensation reactions were also achieved by using catalytic amts. of SmI2 with magnesium to regenerate the divalent samarium reducing agent.
RE.CNT 57  THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
           ALL CITATIONS AVAILABLE IN THE RE FORMAT
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=> s 14 and py<2002
      21548852 PY<2002
L7      70 L4 AND PY<2002

=> d 1-70 bib abs

L7  ANSWER 1 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN  2002:239478 CAPLUS
DN  137:125251
TI  Asymmetric induction in the synthesis of 3,4,5-trisubstituted ferrocenyl-4,5-dihydropyrazoles
AU  Klimova-Berestneva, T.; Garcia, M. Martinez; Meleshonkova, N. N.; Klimova,
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E. I.

CS National Autonomous University of Mexico, Mexico, Mex.

SO Russian Journal of General Chemistry (Translation of Zhurnal Obshchey Khimii) (2001), 71(10), 1626-1631
CODEN: RJGCEK; ISSN: 1070-3632

PB MAIK Nauka/Interperiodica Publishing

DT Journal

LA English

OS CASREACT 137:125251

AB The asym. induction in the synthesis of 3,4,5-trisubstituted 4,5-dihydropyrazoles with ferrocenyl substituents, starting from the E and Z isomers of α,β -unsatd. ketones was studied. A high diastereoselectivity was revealed at the 1,2 chiral center \rightarrow chiral center induction, which is independent of the configuration of the starting chalcones. (E)- and (Z)-2-(ferrocenylmethylene)cyclohexanones were condensed with hydrazine hydrate in EtOH and the products were N-acetylated using Ac₂O to give 55% and 5% of cis- and trans-2-acetyl-3-ferrocenyl-3,3a,4,5,6,7-hexahydro-2H-indazole from the E reactant and 65% and 7% from the Z isomer.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:33408 CAPLUS

DN 136:294920

TI Synthesis of symmetric and unsymmetric 1,1'-dialkenylferrocenes via samarium diiodide promoted reactions of 1,1'-diacetylferrocene with halides

AU Jong, Shean-Jeng; Fang, Jim-Min; Liu, Yi-Hung; Wang, Y.

CS Department of Chemistry, National Taiwan University, Taipei, 106, Taiwan

SO Journal of the Chinese Chemical Society (Taipei, Taiwan) (2001), 48(6A), 1041-1046
CODEN: JCCTAC; ISSN: 0009-4536

PB Chinese Chemical Society

DT Journal

LA English

OS CASREACT 136:294920

AB Monoalkenylferrocenes were prepared from 1,1'-diacetylferrocene and appropriate benzyl bromides by the promotion of samarium diiodide. A practical method for preparation of both sym. and unsym. dialkenylferrocenes was also explored. The reactions were stereoselective to give only (E) double bonds. The unsym. dialkenylferrocene bearing electron-donating substituent (e.g. methoxy group) and electron-withdrawing substituent (e.g. cyano group) on different Ph rings likely exhibits a large nonlinear optical property.

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:879012 CAPLUS

DN 136:200271

TI Ferrocenyl substituted chlorostilbenes and butadienes

AU Senthil Kumar, K.; Kumara Swamy, K. C.

CS School of Chemistry, University of Hyderabad, Andhra Pradesh, Hyderabad, 500046, India

SO Journal of Organometallic Chemistry (2001), 637-639, 616-620
CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier Science S.A.

DT Journal

LA English

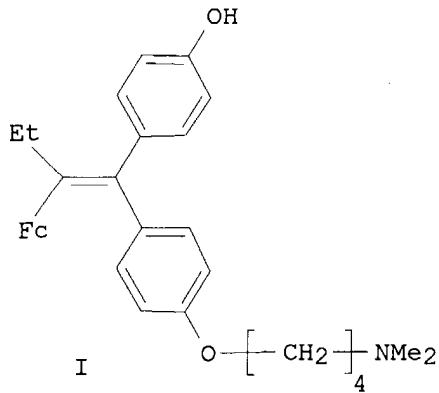
OS CASREACT 136:200271

AB The readily accessible α -chlorophosphonates cyclo-

(OCH₂CMe₂CH₂O)P(O)CH(Cl)-C₆H₄-4-R (R = Me, OMe, Cl, H) react with ferrocenecarboxaldehyde in the presence of NaH [Horner-Wadsworth-Emmons reaction] to give good yields of ferrocenyl substituted chlorostilbenes. The novel bis ferrocenyl butadiene C₅H₅FeC₅H₄CH:CHC(CN):CHC₅H₄FeC₅H₅ (9) as well as the ferrocenyl 2-cyano-1,3-butadienes 4-R-C₆H₄CH:CHC(CN):CHC₅H₄FeC₅H₅ (R = Me, OMe, Cl) were obtained by using the new allylphosphonate cyclo-(OCH₂CMe₂CH₂O)P(O)CH₂C(CN):CHC₅H₄FeC₅H₅; the latter compound was prepared in good yields by the reaction of the Baylis-Hillman adduct, C₅H₅FeC₅H₄CH(OH)C(CN):CH₂, with the cyclic chlorophosphite (OCH₂CMe₂CH₂O)PCl. The electrochem. behavior of the ferrocenyl compds. thus synthesized was studied; two reversible 1-electron processes are observed in the case of compound 9 suggesting a cooperative interaction between the two ferrocenyl residues.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:878999 CAPLUS
DN 136:200269
TI Studies on organometallic selective estrogen receptor modulators. (SERMs)
Dual activity in the hydroxy-ferrocifen series
AU Top, Siden; Vessieres, Anne; Cabestaing, Claude; Laios, Ionna; Leclercq,
Guy; Provot, Christian; Jaouen, Gerard
CS Ecole Nationale Superieure de Chimie de Paris, Paris, 75231, Fr.
SO Journal of Organometallic Chemistry (2001), 637-639, 500-506
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
OS CASREACT 136:200269
GI



AB Synthesis of title compound I (Fc = ferrocenyl), a ferrocene derivative of the antiestrogenic drug hydroxytamoxifen bearing a basic chain-O(CH₂)_nN(CH₃)₂ with n = 4 is presented, together with both studies of its antiproliferative effect on the hormone-dependent MCF7 cell line (estrogen receptor pos. cells) and of its genotoxicity. This mol. is easily prepared via a McMurry coupling reaction. The antiproliferative effect found for I at an incubation molarity of 1 μ M was very close to that found for the usual reference mol., namely OH-tamoxifen. In addition to its structural antiestrogenic effect, I showed cytotoxic activity probably due to the vectored ferrocene. This genotoxic component was confirmed by a 3D

(damaged DNA detection) test, that permits identification and quantification of lesions induced on DNA. Some key interactions of I docked into the alpha-estrogen receptor binding site were also shown.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:878967 CAPLUS
DN 136:200263
TI Synthesis of controlled π -extended conjugate nanostructures of 1,1'-ferrocene
AU Rodriguez, Jose-Gonzalo; Pleite, Sheila
CS Facultad de Ciencias, C1, Departamento de Quimica Organica, Universidad Autonoma, Madrid, 28049, Spain
SO Journal of Organometallic Chemistry (2001), 637-639, 230-239
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
OS CASREACT 136:200263
AB Synthesis of the (E,E)-1,1'-ferrocene nanostructures having controlled π -extended conjugation was satisfactory carried out starting of 1'-[2-(1,3-dioxolan)]-1-formylferrocene (1). The mol. unit (E)-1'-[2-(1,3-dioxolan)]-1-[β -(p-iodophenyl)ethenyl]ferrocene (2), was obtained in excellent yield by treatment of 1 with p-iodobenzyltriphenylphosphonium ylide followed by Z E isomerization, catalyzed by iodine, in quant. yield. Compound (E)-2 was transformed in (E)-1'-{2-(1,3-dioxolan)-1-[β -[4-(3-hydroxy-3-methyl-but-1-ynyl)-phenyl]-ethenyl}ferrocene, (E)-4, by palladium catalyzed cross-coupling with 2-methyl-but-3-yn-2-ol. (E)-4 gives (E)-1-[β -(4-ethynylphenyl)-ethenyl]-1'-[2-(1,3-dioxolan)]ferrocene (E)-5 by powder sodium hydroxide treatment. The mol. unit (E,E)-1-[β -[4-(β -(1'-formyl ferrocenyl)-ethenyl)-phenylethynyl]-phenyl-ethenyl]-1'-formylferrocene, (E,E)-6, was synthesized by palladium catalyzed cross-coupling between the p-iodophenyl derivative (E)-2 and their ethynyl derivative (E)-5, in good yield.

The (E,E)-1,1'-(p-iodophenyl)ethenylferrocene, (E,E)-7, was synthesized by reaction between 1,1'-diformylferrocene and the p-iodobenzyltriphenylphosphonium ylide, as a mixture of isomers which were isolated. Moreover, isomerization of the Z,Z and E,Z mixture to the E,E isomer, was induced by sunlight exposure, catalyzed by iodine, in quant. yield. The (E,E)-1,1'-[β -(4-ethynylphenyl)-ethenyl]ferrocene, (E,E)-10, was synthesized in good yield, by palladium catalyzed cross-coupling of compound (E,E)-7 with 2-methyl-but-3-yn-2-ol, followed by powder sodium hydroxide treatment.

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:878962 CAPLUS
DN 136:200262
TI Facile synthesis of bidimensional ferrocenyl-based branched oligomers by palladium-catalyzed coupling reactions
AU Peruga, Arantxa; Mata, Jose A.; Sainz, Daniel; Peris, Eduardo
CS Departamento de Quimica Inorganica y Organica, Universitat Jaume I, Castellon, E-12080, Spain
SO Journal of Organometallic Chemistry (2001), 637-639, 191-197
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
OS CASREACT 136:200262

AB Ferrocenyl-based star-shaped complexes were obtained by Pd-catalyzed reactions. The synthetic method reported shows an advantage over the traditional Wittig reaction for the synthesis of olefinated compds., both in yields and in selectivity towards the all-E isomers. The electrochem. of the compds. was studied. The crystal structure of E-ferrocenyl-4-(vinylphenyl)vinylene, one of the starting complexes to the star-shaped compds., was determined by single crystal x-ray diffraction.

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:805742 CAPLUS
DN 136:87220
TI Organometallic dyes: Part 1. Synthesis of orange to cyan dyes based on donor-conjugated-acceptor chromogenes using ferrocene as the donor group
AU Asiri, Abdullah Mohamed
CS Chemistry Department, Faculty of Science, King Abdul-Aziz University, Jeddah, 21589, Saudi Arabia
SO Applied Organometallic Chemistry (2001), 15(11), 907-915
CODEN: AOCHEX; ISSN: 0268-2605
PB John Wiley & Sons Ltd.
DT Journal
LA English
AB A novel series of organometallic donor-conjugated-acceptor dyes derived from ferrocene as the donor group have been synthesized via the Knoevenagel reaction of ferrocene carboxaldehyde and various active methylene compds. to give a range of dyes ranging from orange to blue-green in color. The most bathochromic dye is that derived from dialkyl thiobarbituric acid and the least is that derived from the tetralone. The dyes showed an unusual neg. solvatochromism as the solvent polarity increased. All dyes synthesized are expected to have some non-linear optical properties, as evidenced from the pronounced solvatochromism.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:590234 CAPLUS
DN 135:331522
TI Selective synthesis of 1-aryl-2-ferrocenylethylene by cross-metathesis
AU Yasuda, Tomohiro; Abe, Jiro; Iyoda, Tomokazu; Kawai, Tadashi
CS Department of Applied Chemistry, Graduate School of Engineering, Tokyo Metropolitan University, Tokyo, 192-0397, Japan
SO Chemistry Letters (2001), (8), 812-813
CODEN: CMLTAG; ISSN: 0366-7022
PB Chemical Society of Japan
DT Journal
LA English
OS CASREACT 135:331522
AB Novel synthesis of π -conjugated mols. by cross-metathesis reaction of vinylferrocene with a series of vinylarenes was investigated with a molybdenum-based Schrock catalyst (CHCMe_2Ph) $\text{Mo}(\text{N}-2,6-\text{i-Pr}_2\text{C}_6\text{H}_3)[\text{OCMe}(\text{CF}_3)_2]_2$ (1). The cross-metathesis reactions occurred successfully and the cross-metathesis product, i.e., heterodimers, were readily obtained selectively, together with only small amts. of the corresponding self-dimers. Thus, 1 catalyzed cross-metathesis of vinylferrocene with 2-vinylnaphthalene in PhMe gave 100% 1-ferrocenyl-2-(2-naphthyl)ethylene, the crystal structure of which was determined

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:360411 CAPLUS
DN 135:122877
TI Alkyne Metathesis Graft Polymerization: Synthesis of Poly(ferricinium)-Based Silica Supports for Anion-Exchange Chromatography of Oligonucleotides
AU Eder, Karoline; Reichel, Erwin; Schottenberger, Herwig; Huber, Christian G.; Buchmeiser, Michael R.
CS Institute of Analytical Chemistry and Radiochemistry and Institute of General Inorganic and Theoretical Chemistry, University of Innsbruck, Innsbruck, A-6020, Austria
SO Macromolecules (2001), 34(13), 4334-4341
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB 1-[2-(3-Ethynylphenyl)ethenyl]-1',2,2',3,3',4,4',5-octamethylferrocene (I) was prepared via Wittig- and chloro-Wittig-type reactions. I reacts with the well-defined Schrock initiator Mo(N-2,6-Me₂C₆H₃) (CHCMe₂Ph) (OCMe(CF₃)₂)₂ (II) via α -addition. The resulting class VI polymerization system allows the living polymerization of I up to a d.p. of 150. Mesoporous and nonporous silica (Nucleosil 300-5 and Micra, resp.) with different sp. surface area (100 and 2 m²/g, resp.) were surface-derivatized with trichloro-2-norbornen-5-ylsilane, leading to an average surface functionalization of 230 and 50 μ mol norbornene/g, resp. I, ethynylferrocene, and 1-[2-(4-ethynylphenyl)ethenyl]-1',2,2',3,3',4,4',5-octamethylferrocene were surface-grafted onto these silica supports via alkyne metathesis polymerization using II. Typical amts. of grafted monomer were in the range 5-50 μ mol/g. The resulting poly(ferrocene)-grafted supports were subsequently oxidized with iodine to the corresponding poly(ferricinium)-grafted supports and successfully used for anion-exchange chromatog. of oligonucleotides.
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:312313 CAPLUS
DN 135:92966
TI Ferrocenyl- and octamethylferrocenyl-substituted phenylenevinylene-, thienylenevinylene-, and 1,1'-ferrocenylenevinylene spaced ethynes: synthesis, metathesis polymerization, and polymer properties
AU Buchmeiser, Michael R.; Hallbrucker, Andreas; Kohl, Ingrid; Schuler, Norbert; Schottenberger, Herwig
CS Institute of Analytical Chemistry and Radiochemistry, University of Innsbruck, Innsbruck, A-6020, Austria
SO Designed Monomers and Polymers (2000), 3(4), 421-445
CODEN: DMPOF3; ISSN: 1385-772X
PB VSP BV
DT Journal
LA English
AB The preparation of five different conjugatively spaced ferrocenyl- and octamethylferrocenyl-substituted terminal alkynes and their metathesis polymerization using the well-defined Schrock-type catalyst of general formula Mo(N-2,6-Me₂-C₆H₃) (CHCMe₂Ph) (OCMe(CF₃)₂) is described. Besides their progenitors, the novel target ethynes [2-(2-ethynylphenyl)ethenyl]-1',2,2',3,3',4,4',5-octamethylferrocene (I), [2-[(5-ethynyl)thien-2-yl]ethenyl]ferrocene (II), [2-[(5-ethynyl)thien-2-yl]ethenyl]-1',2,2',3,3',4,4',5-octamethylferrocene (III), [2-[4-(ethynyl)phenyl]ethenyl]-1',2,2',3,3',4,4',5-octamethylferrocene, and (E)-[2-(ethynylferrocenyl)ethenyl]-1',2,2',3,3',4,4',5-octamethylferrocene were prepared. All the monomers undergo β -addition with the initiator.

Based on the NMR data of the first insertion products of I, II, and III, a cis configuration is assigned to the double bond in the corresponding first insertion products, while the double bonds in the corresponding polymers are virtually all trans, indicating a fast cis-trans isomerization. The extent of conjugated domains in the corresponding polymers that may be prepared in a living manner up to a d.p. (DP) of 40-50 was determined by UV-visible spectroscopy. While the use of p-substituted phenylene- and 1,3-disubstituted thiophene spacers resulted in polymers with an effective conjugation length (Neff) ≤ 10 , o-phenylene spacers allowed the preparation of polymers with Neff values up to 30. Finally, differential scanning calorimetry (DSC) was utilized to identify and characterize phase transitions. These data provide further evidence for the stiff and rigid character of both the conjugated backbone and the ferrocene-substituted side-chains.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:290456 CAPLUS
DN 135:92710
TI Synthesis of Ferrocenyl Alkenes, Dienes, and Enynes via Samarium Diiodide Promoted Tandem Addition and Dehydration of Ferrocenyl Carbonyls with Halides
AU Jong, Shean-Jeng; Fang, Jim-Min
CS Department of Chemistry, National Taiwan University, Taipei, 106, Taiwan
SO Journal of Organic Chemistry (2001), 66(10), 3533-3537
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
OS CASREACT 135:92710
AB A practical method for preparation of ferrocenyl alkenes, dienes, and enynes from ferrocenyl carbonyls was explored. A one-pot operation using samarium diiodide to promote the condensation reactions of ferrocenecarboxaldehyde, acetylferrocene, benzoylferrocene, and butanoylferrocene with benzyl bromides, allyl bromide, propargyl bromide, and 1-bromo-3-chlorobutane gave the olefinic products in very high yields. The condensation reactions were also achieved by using catalytic amts. of SmI₂ with magnesium to regenerate the divalent samarium reducing agent.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:279073 CAPLUS
DN 135:107430
TI Solvent-free synthesis of ferrocenylethene derivatives
AU Liu, Wan-yi; Xu, Qi-hai; Ma, Yong-xiang; Liang, Yong-min; Dong, Ning-li; Guan, De-peng
CS National Laboratory of Applied Organic Chemistry, Lanzhou University, Lanzhou, 730000, Peop. Rep. China
SO Journal of Organometallic Chemistry (2001), 625(1), 128-131
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
OS CASREACT 135:107430
AB Herein, the authors report a fast, mild, efficient and simple Wittig reaction in a dry state to get ferrocenylethene derivs. The Z and E isomers can be separated by chromatog. and many isomers were characterized for the 1st time. Thus, grinding RCHO (R = Fc, Ph, 4-FcC₆H₄, 4-MeOC₆H₄) with 1 equiv R₁CH₂P+Ph₃X- (R₁ = Ph, X = Cl; R₁ = Fc, X = iodide; R₁ = 4-ClC₆H₄, 4-BrC₆H₄, 3-O₂NC₆H₄, Bz, 4-BrC₆H₄CO, H, X = Br) and 1.5 equiv NaOH with a

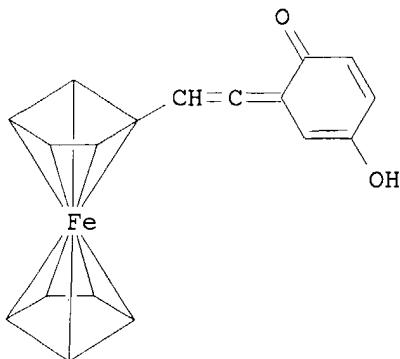
pestle in a mortar at room temperature or held after grinding at 65° gave 62-100% conversions to afford Z/E mixts. of RCH:CHR1 in which the E isomer predominated.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:895690 CAPLUS
DN 134:179057
TI 57Fe-Mossbauer spectroscopic study of monomeric and polymeric ferrocenyl- and octamethylferrocenyl-substituted ethynes
AU Schottenberger, H.; Buchmeiser, M. R.; Herber, R. H.
CS Institute of General, Inorganic and Theoretical Chemistry, University of Innsbruck, Innsbruck, A-6020, Austria
SO Journal of Organometallic Chemistry (2000), 612(1-2), 1-8
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
AB A series of four monomeric and four polymeric ferrocenyl- and octamethylferrocenyl-substituted 1-alkynes, ethynylferrocene (I), (o-ethynylphenyl)ferrocene (II), 1-[2-(o-ethynylphenyl)ethen-1-yl]-1',2,2',3,3',4,4',5-octamethylferrocene (III), novel 1-[2-(o-ethynylphenyl)ethen-1-yl]-1',2,2',3,3',4,4',5-octamethylferrocenium hexafluorophosphate, and poly(ethynylferrocene) (IV), poly[(o-ethynylphenyl)ferrocene] (V), poly[1-[2-(o-ethynylphenyl)ethen-1-yl]-1',2,2',3,3',4,4',5-octamethylferrocene] (VI), and novel poly[1-[2-(o-ethynylphenyl)ethen-1-yl]-1',2,2',3,3',4,4',5-octamethylferrocenium hexafluorophosphate], have been studied by temperature-dependent 57Fe-Mossbauer spectroscopy. The relevant Mossbauer parameters have been determined and are compared with the data obtained for the model compound octamethylferrocene (OMF). The data obtained by 57Fe-Mossbauer spectroscopy reflect a small decrease of s-electron d. from the ferrocene moiety to the conjugated backbone, as is demonstrated by the smaller isomeric shift of the monomers I-III in comparison with the corresponding polymers IV-VI. As may be deduced from the temperature dependence of the recoil-free fraction and the calculated lattice temps., the polymers are much 'softer' (within the definitions of Mossbauer spectroscopy) than the corresponding monomers. Finally, an unusual phase transition has been observed in OMF some 80°C below the m.p., which appears to lead to a large, sudden, and unexpected increase in the mean-square-amplitude of vibration of the metal atom in Me substituted ring systems. This anomalous T-dependence of the recoil-free fraction, which is associated with the presence of the ring Me groups, is not observed when one (or more) of the ring protons is replaced by a sterically bulky side chain, as in I-III.
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:862005 CAPLUS
DN 134:147687
TI Synthesis of a Vinylene-Bridged Ferrocene-Hydroquinone Complex and Its Unusual Structural Change Originated by Proton-Coupled Electron Transfer
AU Kurihara, Masato; Sano, Hiroki; Murata, Masaki; Nishihara, Hiroshi
CS Department of Chemistry School of Science, The University of Tokyo, Bunkyo-ku Tokyo, 113-0033, Japan
SO Inorganic Chemistry (2001), 40(1), 4-5
CODEN: INOCAJ; ISSN: 0020-1669
PB American Chemical Society
DT Journal
LA English

OS CASREACT 134:147687
GI



AB Wittig coupling reaction of $\text{FcCH}_2\text{P}+\text{Ph}_3\text{Br}^-$ with 2,5-ditosylbenzaldehyde, followed by deprotection of the tosyl group and isolation by TLC gave 16% title complex, trans- $\text{FcCH}:\text{CHC}_6\text{H}_3(\text{OH})_2$. Treating 1 with 2 equiv $[\text{Fe}(\eta^5\text{-C}_5\text{H}_4\text{Cl})_2]+\text{PF}_6^-$ in MeOH-MeCN gave 76% $\text{FcCH}:\text{C}:\text{C}[\text{COCH}:\text{CHC}(\text{OH}):\text{CH}]_3$ (shown as I), which has both an allene and a quinonoid structure, by 2-electron oxidation and 2-proton elimination. Protonation of diamagnetic 3 with $\text{CF}_3\text{SO}_3\text{H}$ afforded a paramagnetic semiquinone-ferrocenium species observable by ESR and UV-Vis-near-IR spectra.

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 15 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:498555 CAPLUS
DN 133:224234
TI Near infrared dyes by combination of squaraine and ferrocene chromophores
AU Meier, H.; Petermann, R.
CS Institute of Organic Chemistry, University of Mainz, Mainz, D-55099, Germany
SO Tetrahedron Letters (2000), 41(29), 5475-5478
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
AB Squaraines represent a class of compds. which attracts much attention in materials science. A synthetic sequence for the preparation of sym. squaraines which contain ferrocene units as electron donors is described. The compds. exhibit, in dichloromethane or chloroform, two intense absorption bands. One of them is located at 641/650 nm - a normal region for squaraines; however, the other band is strongly shifted to long wavelengths and has its maximum at 921/961 nm. Dodecyl and 2-ethylhexyl side chains enhance the solubility of these compds., which represent a new type of NIR dyes.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:376076 CAPLUS
DN 133:150632
TI Synthesis and solvatochromism of some dipolar aryl-phosphonium and -phosphine oxide systems
AU Allen, D. W.; Mifflin, J. P.; Skabara, P. J.
CS Division of Chemistry, Sheffield Hallam University, Sheffield, S1 1WB, UK

SO Journal of Organometallic Chemistry (2000), 601(2), 293-298
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
AB The synthesis is reported of dipolar arylphosphonium salts bearing ferrocenylethenyl, 2-thienylethenyl, 4-dimethylaminophenylethenyl, or (4-dimethylaminophenyl)butadienyl electron-donor centers, together with a study of their course of alkaline hydrolysis, which provides a convenient synthetic route to related dipolar phosphine oxides. The phosphonium salts exhibit a modest degree of neg. solvatochromism, whereas the related phosphine oxides show a small pos. solvatochromic effect. In the case of the ferrocenyl systems, the electronic effects of the P acceptor group on the ferrocene unit were studied by cyclic voltammetry.

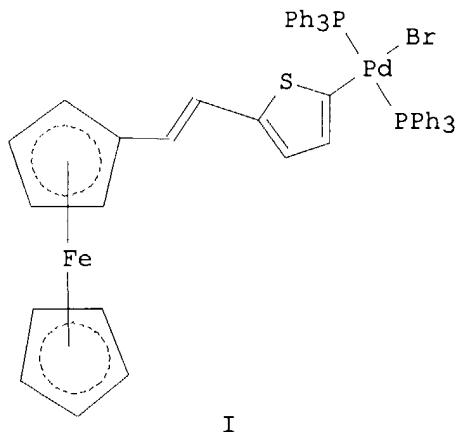
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:757538 CAPLUS
DN 132:165748
TI Access to Well-Defined Heterogeneous Catalytic Systems via Ring-Opening Metathesis Polymerization (ROMP): Applications in Palladium(II)-Mediated Coupling Reactions
AU Buchmeiser, Michael R.; Wurst, K.
CS Institute of Analytical Chemistry and Radiochemistry and the Institute of General Inorganic and Theoretical Chemistry, University of Innsbruck, Innsbruck, A-6020, Austria
SO Journal of the American Chemical Society (1999), 121(48), 11101-11107
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
OS CASREACT 132:165748
AB The preparation of a new heterogeneous palladium(II)-based catalyst and its homogeneous analog and their use for Heck-type, alkyne and amine couplings are described. The heterogeneous catalytic system is based on a polymer-bound dichloropalladium di(2-pyridyl)amide and was prepared via ring-opening metathesis copolymer. of 2-norbornene-5-[N,N-di(2-pyridyl)] carbamide with 1,4,4a,5,8,8a-hexahydro-1,4,5,8-exo-endo-dimethanonaphthalene and subsequent loading of the resulting resin with palladium(II) chloride. Target catalyst was a palladium complex of endo-N,N-Di-2-pyridinylbicyclo[2.2.1]hept-5-ene-2-carboxamide polymer with (1 α ,4 α ,4a α ,5 β ,8 β ,8a α)-1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanonaphthalene. The heterogeneous catalyst is air, moisture, and temperature stable up to 150 °C and highly active (94-99% yields) in the vinylation of aryl iodides and aryl bromides (Heck-type couplings) with turn-over nos. (TONs) of up to 210000. Even higher TONs (up to 350000) may be achieved in the arylation of alkynes. High yields (\leq 95%) and TONs (\leq 24000) may addnl. be achieved in the tetrabutylammonium bromide (TBAB) assisted vinylation of aryl chlorides. Moderate yields (<65%) and TONs (<4000) are observed in the amination of aryl bromides. A soluble analog of the heterogeneous system, N,N-di(2-pyridyl)acetamide palladium dichloride (2), was prepared from palladium(II) chloride and N,N-di(2-pyridyl)acetamide and its chloride was characterized by X-ray anal. It crystallizes in the monoclinic space group P21/n, a = 835.0(1) pm, b = 1494.3(4) pm, c = 1199.3(2) pm, α = 90°, β = 109.05(2)°, γ = 90°, z = 4. It served as a model compound for the elucidation of the actual geometry of the catalytic species. The un-strained geometry of the chloride with almost ideal angles and bond lengths explains the high stability of the catalytic center. The significantly higher catalytic activity of the heterogeneous

system compared to the homogeneous one suggests well-defined ligand-bound catalytic sites rather than polymer-supported palladium colloids.

RE.CNT 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:712697 CAPLUS
DN 132:64385
TI Ferrocene End-Capped Palladium(II) and Platinum(II) Complexes with Thiophene Spacers
AU Thomas, K. R. Justin; Lin, Jiann T.; Lin, Kuan-Jiuh
CS Institute of Chemistry, Academia Sinica, Taipei, 115, Taiwan
SO Organometallics (1999), 18(25), 5285-5291
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
GI



AB Heterobimetallics containing ferrocene and Pd(II) or Pt(II), e.g., I, were synthesized by oxidative addition of ferrocene-substituted halo thiophenes with zerovalent Pd or Pt precursors. The stable solids were thoroughly characterized by elemental anal., NMR, UV-visible spectroscopy, and cyclic voltammetry. The rich redox chemistry of the complexes depends on the conjugation length that separates the two metal sites. The crystal structure of a Pt σ -thienyl complex I was determined

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:569674 CAPLUS
DN 131:286598
TI Tricarbonyl(η^6 -arene)chromium and ferrocene complexes linked with aromatic spacers
AU Plyta, Zoi F.; Prim, Damien; Tranchier, Jean-Philippe; Rose-Munch, Francoise; Rose, Eric
CS Laboratoire de Synthese Organique et Organometallique, UMR CNRS 7611, Paris, 75252, Fr.
SO Tetrahedron Letters (1999), 40(37), 6769-6771
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.

DT Journal
LA English
AB The syntheses of alkenyl arenic bridged dinuclear complexes, trans-(η 6-C6H5(HC:CHFc))Cr(CO)3 and trans-(η 6-C6H5(HC:CH(RFc))Cr(CO)3 (R = 1,4-C6H4, 1,3-C6H4, 2,5-C4H2S) were performed by reacting aromatic ferrocenyl-substituted aldehydes with tricarbonylchromium-complexed benzylphosphonate.
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:297641 CAPLUS
DN 131:102368
TI Hydrocarbon bridged metal complexes XLV. Dinuclear polyene-bridged Fischer carbene complexes and a star-shaped benzene-bridged tris(ferrocenyl-decapentaenyl) compound
AU Briel, Oliver; Fehn, Armin; Beck, Wolfgang
CS Institut fur Anorganische Chemie, Ludwig-Maximilians-Universitat Munchen, Munich, D-80333, Germany
SO Journal of Organometallic Chemistry (1999), 578(1-2), 247-251
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
AB Condensation of carotenoid polyene dialdehydes, 1,1'-ferrocene dialdehydes and of 9-ferrocenyl-2,7-dimethylnonatetraenal with the Fischer carbene complexes (OC)5W:C(NMe2)CH2SiMe3 or (OC)5M:C(Me)(OMe) (M = Cr, W) in the presence of BuLi or SiMe3Cl/NET3 yields the bis(carbene) complexes 1-4 and the donor acceptor substituted complexes 5, 6. The star-shaped trinuclear mols. 7 and 8 were obtained under Wittig conditions from 1,3,5-tris[(triphenylphosphonio)methyl]benzene tribromide and ferrocene aldehyde or 9-ferrocenyl-2,7-dimethyl-nonatetraenal.
RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:297625 CAPLUS
DN 131:73743
TI Redox active alkenyl-bridged bi- and trinuclear arene-Cr(CO)3-complexes by Horner-Emmons-Wadsworth olefinations
AU Muller, Thomas J. J.
CS Institut fur Organische Chemie, Ludwig-Maximilians-Universitat Munchen, Munich, D-80333, Germany
SO Journal of Organometallic Chemistry (1999), 578(1-2), 95-102
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
OS CASREACT 131:73743
AB Alkenyl-bridged arene-Cr(CO)3-complexes are readily synthesized in good yields by Horner-Emmons-Wadsworth (HEW) olefinations from Cr(CO)3-complexed benzylphosphonates and organometallic aldehydes. The resulting bi- and trinuclear homo- and heterometallic complexes display a strong electronic coupling between the metal fragments as shown by a strong correlation of the CO resonances in the C NMR spectra and the chromium carbonyl metal-ligand charge transfer (MLCT) bands in the UV/visible spectra. Also, the electrochem. of the oligonuclear complexes was studied by cyclic voltammetry.
RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:41094 CAPLUS
DN 130:182569
TI Synthesis and Structure of Titanocene Complexes with η^2 -Coordinated Internal Ferrocenylacetylenes
AU Stepnicka, Petr; Gyepes, Robert; Cisarova, Ivana; Varga, Vojtech; Polasek, Miroslav; Horacek, Michal; Mach, Karel
CS Department of Inorganic Chemistry, Charles University, Prague, 128 40, Czech Rep.
SO Organometallics (1999), 18(4), 627-633
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
AB The reduction of $(\eta^5\text{-C}_5\text{H}_5\text{-nMen})_2\text{TiCl}_2$ ($n = 0, 4$, and 5) complexes by Mg metal in THF and in the presence of $[(\text{trimethylsilyl})\text{ethynyl}]$ ferrocene (2) or $[(\text{phenyl})\text{ethynyl}]$ ferrocene (3) affords the $(\eta^5\text{-C}_5\text{H}_5\text{-nMen})_2\text{Ti}(\eta^2\text{-FcC.tpbond.CR})$ complexes [Fc = $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\eta^5\text{-C}_5\text{H}_4)$, R = SiMe₃ (4-6) and Ph (7-9)]. Crystal structures of 5 and 9 show a titanacyclopene-like mode of coordination of the acetylenes 2 and 3. Bonding of the acetylenes to the titanocene unit results in a remarkable downfield shift of ¹³C NMR resonances of the acetylenic C atoms and in a large red shift of the $\nu(\text{C.tpbond.C})$ wavenumbers. Testing the complexes 6 and 9 toward head-to-tail dimerization of HC.tpbond.CSiMe_3 showed that compound 9 induces dimerization to give exclusively 2,4-bis(trimethylsilyl)but-1-en-3-yne (10), whereas complex 6 is inactive.
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:655446 CAPLUS
DN 130:52535
TI Synthesis of manganese tricarbonyl cationic complexes of ferrocenyl substituted arenes via a manganese tricarbonyl cation transfer reaction
AU Kim, Jung Eun; Son, Seung Uk; Lee, Su Seong; Chung, Young Keun
CS Dep. Chem. and Cent. Molecular Catalysis, Coll. Natural Sci., Seoul Natl. Univ., Seoul, 151-742, S. Korea
SO Inorganica Chimica Acta (1998), 281(2), 229-234
CODEN: ICHAA3; ISSN: 0020-1693
PB Elsevier Science S.A.
DT Journal
LA English
OS CASREACT 130:52535
AB Mn tricarbonyl cations of ferrocenyl substituted arenes were synthesized by the reaction of $[(\text{naphthalene})\text{Mn}(\text{CO})_3]\text{BF}_4$ with the corresponding arenes in CH₂Cl₂. When the arenes are phenylferrocene, (4-methylphenyl)ferrocene, (2,6-dimethylphenyl)ferrocene, (2,4,6-trimethylphenyl)ferrocene, (trans-4-methylstyryl)ferrocene, or (trans-2,4,6-trimethylstyryl)ferrocene, the diiron compds. $[(\text{Fc-arene})\text{FeCp}]^+$ and $[(\text{Fc-arene})\text{Fe}(\text{C}_5\text{H}_4\text{-arene})]^+$ were obtained as side-products. One of the diiron compds. was characterized by x-ray crystallog.
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

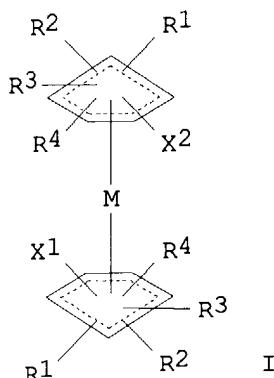
L7 ANSWER 24 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:495845 CAPLUS
DN 129:216723
TI Synthesis and characterization of new ferrocenyl heterobimetallic compounds with high NLO responses
AU Mata, Jose; Uriel, Santiago; Peris, Eduardo; Llusar, Rosa; Houbrechts, Stephan; Persoons, Andre
CS Departamento de Quimica Inorganica y Organica, Universitat Jaume I,

SO Castellon, E-12080, Spain
 Journal of Organometallic Chemistry (1998), 562(2), 197-202
 CODEN: JORCAI; ISSN: 0022-328X
 PB Elsevier Science S.A.
 DT Journal
 LA English
 AB Several ferrocenyl based heterobimetallic compds.
 $(CpFeC5H4(CH:CH)nPh(Cr(CO)3)$ ($n = 1, 2$); $(4-(CpFeC5H4CH:CH)C6H4CN)M(CO)5$ ($M = Cr, W$); $(4-(CpFeC5H4CH:CH)pyridine)M(CO)5$ ($M = Cr, Mo, W$) were obtained and characterized, and their NLO responses were measured. The observed hyperpolarizability (β) values are among the highest of the organometallic based materials reported up to date. The heterobimetallic compds. were also studied by cyclic voltammetry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 25 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1998:298230 CAPLUS
 DN 129:34423
 TI Electrophotographic photoreceptors using novel metallocene derivative
 IN Mitsumori, Mitsuyuki
 PA Mitsubishi Chemical Industries Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10123733	A2	19980515	JP 1996-280728	19961023 <--
PRAI	JP 1996-280728				
OS	MARPAT 129:34423				
GI					



AB The title photoreceptors have, on a conductive support, a photoreceptor containing a metallocene derivative I [$R1, R2, R3, R4 = H, \text{halo, alkyl, alkoxy, silyl, phosphino, aryl, heterocyclyl}$; $M = \text{metal atom}$; $X1, X2 = H, (CR5:CR6)iCR7:CR8R9$ [$i = 0-4$; $R5-9 = H, \text{alkyl, alkoxy, CN, aryl, heterocycle}$, the pair of $R8$ and $R9$ may condense to form a carbon ring or heterocycle; when 1 of $R8$ and $R9$ is H or an alkyl, then the other is aryl or heterocyclyl]; $X1 = X2 \neq H$]. The photoreceptors show high photosensitivity and durability in repeated use.

L7 ANSWER 26 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1997:690372 CAPLUS

DN 127:346496
TI Facile route to ferrocifen, 1-[4-(2-dimethylaminoethoxy)phenyl]-1-phenyl-2-ferrocenyl-but-1-ene, first organometallic analog of tamoxifen, by the McMurry reaction
AU Top, Siden; Dauer, Benedicte; Vaissermann, Jacqueline; Jaouen, Gerard
CS Lab. Chimie Organometallique, Ecole Natl. Superieure Chimie Paris, URA CNRS, Paris, 75231, Fr.
SO Journal of Organometallic Chemistry (1997), 541(1-2), 355-361
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier
DT Journal
LA English
OS CASREACT 127:346496
AB As part of the search for tamoxifen substitutes that could be useful in the treatment of breast cancer, the use of organometallic complexes was studied. For this purpose a synthesis was developed for ferrocifen, the prototype of this new series of complexes. Low valent Ti-mediated (TiCl₄/Zn) cross-coupling of 4-MeOC₆H₄COPh with ferrocenyl Et ketone affords the corresponding but-1-ene in high yield (66%), from which ferrocifen, an E/Z mixture of FcC₂H₅:CPh(C₆H₄OCH₂CH₂NMe₂-4), is rapidly prepared in an overall yield of 41% from ferrocene.

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 27 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:479868 CAPLUS
DN 127:176536
TI Synthesis and crystal structure of (E)-[1-ferrocenyl-2-(4-chlorophenyl)ethylene]
AU Qian, Ying; Sun, Yue-Ming; Liu, Ju-Zheng; Chen, Jian; Hu, Chun-Hua; Zheng, Pei-Ju
CS Dep. of Chemistry, Southeast University, Nanjing, 210018, Peop. Rep. China
SO Jiegou Huaxue (1997), 16(4), 315-319
CODEN: JHUADF; ISSN: 0254-5861
PB "Jiegou Huaxue" Bianji Weiyuanhui
DT Journal
LA English
AB The single crystal structure of the donor-acceptor ferrocenyl derivative C₁₈H₁₅ClFe (Mr = 322.62) was determined, belonging to orthorhombic crystal system, space group P212121 with a 11.307(2), b 8.471(2), c 15.427(3) Å, Z = 4, dc = 1.45 g cm⁻³, λ (MoK α) = 0.71073 Å, μ = 11.9 cm⁻¹, F(000) = 664. The final R value for 1534 observed [$I > 3\sigma(I)$] reflections is 0.060. The configuration of the C:C double bond is trans. The C₅H₄CH:CHC₆H₄Cl fragment is almost planar. The rings of ferrocene are almost in the eclipsed positions with each other.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 28 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:383233 CAPLUS
DN 127:121839
TI Synthesis of ferrocene derivatives with π -extended conjugation
AU Rodriguez, Jose-Gonzalo; Gayo, Manuel; Fonseca, Isabel
CS Departamento de Quimica Organica, C1, Facultad de Ciencias, Universidad Autonoma, Cantoblanco, 28049, Madrid, Spain
SO Journal of Organometallic Chemistry (1997), 534(1-2), 35-42
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier
DT Journal
LA English
AB Synthesis of (E)-1-ferrocenyl-2-(p-iodophenyl)ethene was carried out by the Wittig reaction between (p-iodobenzyl)triphenylphosphonium ylide and

ferrocene carboxaldehyde, obtained as a mixture of E/Z isomers. Z→E isomerization was induced by iodine-NBS in quant. yield. The x-ray mol. structure of this (E)-isomer indicates that the mols. are linked by charge transfer complexation between the iodine atom and the cyclopentadiene ring. The conjugation of the mol. of 1-ferrocenyl-2-(p-iodophenyl)ethene was expanded to the (Z,Z)- and (E,E)-FcCH:CHC6H4C6H4CH:CHFc 4,4'-biphenyl derivs. and to the (Z,Z)- and (E,E)-FcCH:CHC6H4C.tplbond.CC.tplbond.CC6H4C H:CHFc systems (preps. given), both as centrosym. structures.

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 29 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:101344 CAPLUS
DN 126:199646
TI Facile synthesis of novel bis- and tetrakis(2-ferrocenylvinyl)[2.2]paracyclophanes by palladium-catalyzed coupling reactions
AU Kay, Kwang Yol; Baek, Yong Gu; Han, Dae Won; Yeu, Sang Yong
CS Dep. Chem., Ajou Univ., Suwon, 442749, S. Korea
SO Synthesis (1997), (1), 35-37
CODEN: SYNTBF; ISSN: 0039-7881
PB Thieme
DT Journal
LA English
OS CASREACT 126:199646
AB Mono-, bis-, and tetrakis(2-ferrocenylvinyl)[2.2]paracyclophanes were synthesized in 52, 24, and 17% yields, resp., by Pd-catalyzed Heck reactions of vinylferrocene with mono-, bis-, and tetrakis(bromo-substituted) [2.2]paracyclophanes.

L7 ANSWER 30 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:72505 CAPLUS
DN 126:157593
TI Synthesis of ferrocenyl(aryl)ethylenes and their cyclodextrin complexes as potential materials for nonlinear optics
AU Sokolov, V. I.; Bulygina, L. A.
CS Inst. Elementoorg. Soedin., RAN, Moscow, 117813, Russia
SO Izvestiya Akademii Nauk, Seriya Khimicheskaya (1996), (9), 2361-2363
CODEN: IASKEA
PB Institut Organicheskoi Khimii im. N. D. Zelinskogo Rossiiskoi Akademii Nauk
DT Journal
LA Russian
AB Cis and trans isomers of 1-ferrocenyl-2-(2-(4-)nitrophenyl)ethylenes were prepared and separated, and their complexes (as isomeric mixts.) with β-cyclodextrin were prepared for the study of nonlinear optical properties (no data).

L7 ANSWER 31 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:360115 CAPLUS
DN 125:115355
TI Synthesis of ferrocene-based redox-active polymers via palladium-catalyzed coupling reactions
AU Bochmann, Manfred; Lu, Jianjun; Cannon, Roderick D.
CS School of Chemical Sciences, University of East Anglia, Norwich, NR4 7TJ, UK
SO Journal of Organometallic Chemistry (1996), 518(1-2), 97-103
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier
DT Journal
LA English

AB 1,1'-Difunctionalized ferrocenes $\text{Fe}(\text{C}_5\text{H}_4\text{Z})_2$ [$\text{Z} = 4\text{-BrC}_6\text{H}_4$, $4\text{-BrC}_6\text{H}_4\text{CH}_2\text{C}(\text{O})-$, $4\text{-BrC}_6\text{H}_4\text{CH:CH-}$] undergo cross-coupling reactions with the dizinc reagent $(\text{ClZnC}_6\text{H}_4)_2\text{COCH}_2\text{CHC}(\text{Me})\text{O}$ to give a series of conjugated and non-conjugated aromatic poly(ferrocenes) with ferrocenediyl moieties as part of the polymer backbone. Similar products are obtained by Heck-arylation of 1,1'-divinylferrocene with diiodoarenes $\text{I}-\text{R}-\text{I}$ ($\text{R} = 1,4\text{-C}_6\text{H}_4$, $1,1'\text{-C}_6\text{H}_4\text{-C}_6\text{H}_4$, $2,5\text{-C}_4\text{H}_2\text{S}$, $1,1'\text{-C}_6\text{H}_4\text{OC}_6\text{H}_4$). The coupling products form orange to deep red solids, which are poorly soluble and oligomeric in most cases. Cyclic voltammetry measurements in dichloromethane solution give redox potentials close to the parent ferrocenes, with apparently very little interaction between the widely spaced iron centers.

L7 ANSWER 32 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:178227 CAPLUS
DN 123:56514
TI A Versatile Tandem Catalysis Procedure for the Preparation of Novel Amino Acids and Peptides
AU Burk, Mark J.; Lee, Jeffrey R.; Martinez, Jose P.
CS Department of Chemistry, Duke University, Durham, NC, 27706, USA
SO Journal of the American Chemical Society (1994), 116(23), 10847-8
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
AB A new and efficient tandem catalysis procedure has been developed for the preparation of a wide range of novel α -amino acid derivs. and peptides. This method utilizes the author's 1,2-bis(2-5,diethylphospholan-1-yl)benzene (Et-DuPHOS)-Rh or Pr-DuPHOS-Rh-catalyzed α -enamide hydrogenation reactions to produce specific functionalized α -amino acids which can serve as common intermediates in Pd-catalyzed cross-coupling reactions. For example, bromophenylalanine derivs. $\text{Ac-D-NHCH}(\text{CH}_2\text{C}_6\text{H}_4\text{R})\text{CO}_2\text{Me}$ ($\text{R} = 2\text{-Br}$, 3-Br , 4-Br) were prepared and employed in Pd-catalyzed cross-coupling reactions with a variety of boronic acid derivs. The true advantage of the method is revealed through the preparation of novel ring-substituted arylalanine derivs. Finally, bromophenylalanines were incorporated into di- and tripeptides, and the rapid construction of arrays of analogous peptides via cross-coupling reactions were demonstrated. These results potentially form the basis of a powerful new strategy for conducting detailed structure-activity relationship studies.

L7 ANSWER 33 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:701033 CAPLUS
DN 121:301033
TI Palladium-catalyzed coupling of vinylferrocene with aromatic halides - a highly efficient route to (ferrocenylvinyl)arenes
AU Koenig, Burkhard; Zieg, Harald; Bubenitschek, Peter; Jones, Peter G.
CS Inst. Organische Chemie, Technischen Univ. Braunschweig, Braunschweig, 38106, Germany
SO Chemische Berichte (1994), 127(9), 1811-13
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA English
OS CASREACT 121:301033
GI

AB (Ferrocenylvinyl)arenes, e.g. I, II, and III are obtained from vinylferrocene and substituted aromatic and heteroarom. halides by palladium-catalyzed Heck-type reactions. Up to three ferrocene units are introduced in one step by the multifold reaction of 1,2-dibromo- or 1,3,5-tribromobenzene with vinylferrocene. The first crystal structure of a bis(ferrocenylvinyl)benzene chromophore II is reported.

L7 ANSWER 34 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:299439 CAPLUS
DN 120:299439

TI Organometallic Nonlinear Optical Polymers. 4. Organometallic Main-Chain, Side-Chain, and Guest-Host Polymers: A Study of Their Orientation and Relaxation Using Second Harmonic Generation

AU Wright, Michael E.; Toplikar, Edward G.; Lackritz, Hilary S.; Kerney, John T.

CS Department of Chemistry and Biochemistry, Utah State University, Logan, UT, 84322-0300, USA

SO Macromolecules (1994), 27(11), 3016-22
CODEN: MAMOBX; ISSN: 0024-9297

DT Journal
LA English

AB Several new organometallic polymers were prepared and structure-property relationships for local polymer mobility and the net orientation of the organometallic nonlinear optical (NLO)-phores were investigated using second harmonic generation (SHG). The methacrylate organometallic derivs. $\{\eta_5\text{-C}_5\text{H}_4\text{CH}_2\text{O}_2\text{CC}(\text{CH}_3)\text{:CH}_2\}\text{Fe}\{\eta_5\text{-C}_5\text{H}_4\text{CH:C}(\text{CN})\text{X}\}$ [X = p-C₆H₅Br, 4-pyridyl, CN, CO₂Et] and $\{\eta_5\text{-C}_5\text{H}_4\text{CH:C}(\text{CN})\text{CO}_2\text{(CH}_2\text{)}\text{CO}_2\text{CC}(\text{CH}_3)\text{:CH}_2\}\text{Fe}\{\eta_5\text{-C}_5\text{H}_5\}$ were prepared and polymerized with Me methacrylate (5/95, mol/mol) to give copolymers. Comonomer $\{\eta_5\text{-C}_5\text{H}_4\text{CH:C}(\text{CN})\text{CO}_2\text{(CH}_2\text{)}\text{CO}_2\text{OH}\}\text{Fe}\{\eta_5\text{-C}_5\text{H}_4\text{CH}_2\text{OH}\}$ (I) was synthesized and reacted with 1,6-diisocyanatohexane to yield a main-chain NLO organometallic polyurethane (Mn = 7600, T_m = 176°). In addition, a poly(Me methacrylate) guest-host film of NLO-phore I was prepared. Corona poling and SHG measurements were made under a variety of carefully controlled exptl. conditions. In the case of the covalently bound ferrocenyl NLO-phore, temporal stability was greatest for the smaller acceptor group CH:C(CN)₂. Phys. aging the organometallic polymers prior to poling produced samples which displayed a smaller initial SHG signal; however, the signal was significantly more stable for a longer time. The guest-host system using NLO-phore I, with its multiple H-bonding sites, was observed to have very good long-term temporal stability. The guest-host polymer was poled neg. and showed enhanced temporal stability in comparison to a pos. poled sample. The organometallic main-chain copolymer responded well to poling but had concomitant decomposition, leading to an underestn. of orientational stability.

L7 ANSWER 35 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:218592 CAPLUS
DN 120:218592

TI Organometallic NLO polymers. Linear main-chain NLO polymers of ferrocene

AU Wright, Michael E.; Topilkar, Edward G.

CS Dep. Chem. Biochem., Utah State Univ., Logan, UT, 84322-0300, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1992), 33(1), 1125-6
CODEN: ACPPAY; ISSN: 0032-3934

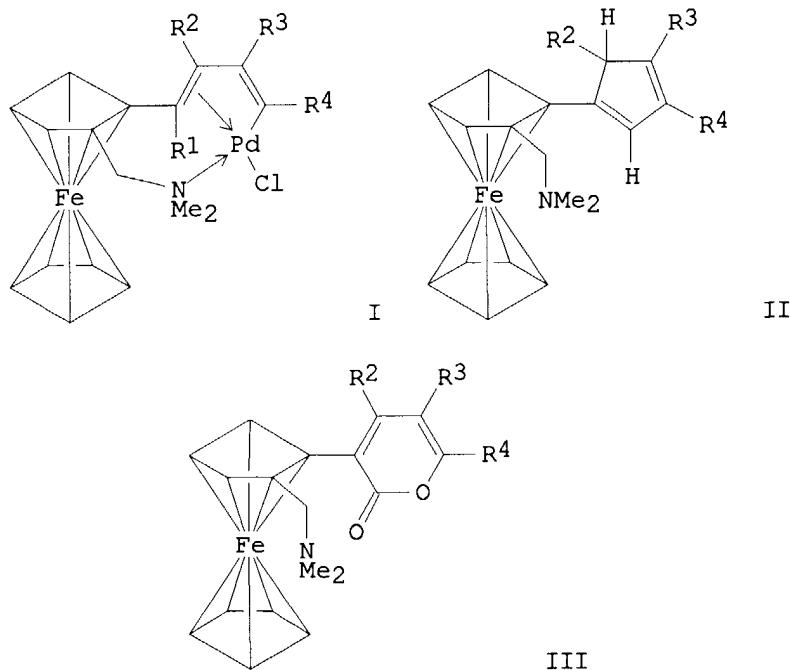
DT Journal
LA English

AB Six ferrocene monomers containing substituted vinyl group, EtO₂C(NC)C=CH and HO(CH₂)₆O groups, or NCCH₂CO₂(CH₂)₆O and CHO groups were prepared. Single-crystal mol. structure of monomers containing substituted vinyl group was determined and the monomer containing NCCH₂CO₂(CH₂)₆O and CHO groups was homopolymerd. via intramol. Knoevenagel condensation to give an unsatd.

polyether-polyester containing ferrocene moieties in the main chain and CN pendant groups. The homopolymer is useful as a nonlinear optical material.

L7 ANSWER 36 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:193051 CAPLUS
DN 120:193051
TI Organometallic nonlinear optical (NLO) polymers. Further development of pendant ferrocene poly(methyl methacrylate) copolymers
AU Wright, Michael E.; Toplikar, Edward G.
CS Dep. Chem. Biochem., Utah State Univ., Logan, UT, 84322-0300, USA
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1993), 34(1), 542-3
CODEN: ACPPAY; ISSN: 0032-3934
DT Journal
LA English
AB Pendant ferrocene-Me methacrylate copolymers were prepared by polymerization of Me methacrylate with vinyl ferrocene compds. The polymers can be used as NLO materials.

L7 ANSWER 37 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:472786 CAPLUS
DN 119:72786
TI Intramolecular carbo- and heterocyclization induced by systematic demetalation of (η^3 -butadienyl)palladium complexes
AU Pfeffer, Michel; Sutter, Jean Pascal; DeCian, Andre; Fischer, Jean
CS Lab. Synth. Met.-Induites, Univ. Louis Pasteur, Strasbourg, F-67070, Fr.
SO Organometallics (1993), 12(4), 1167-73
CODEN: ORGND7; ISSN: 0276-7333
DT Journal
LA English
GI



AB Organopalladium complexes, e.g., I, obtained via the insertion of two internal alkynes into the Pd-C bond of cyclopalladated compds. were demetalated in the presence of PPh₃ in methanol. The type of the resulting organic product depends only upon the nature of the various substituents of the butadienyl fragment η^3 -bound to Pd in the starting materials. Examples, II and III, of what could be achieved are given.

L7 ANSWER 38 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:102177 CAPLUS
DN 118:102177
TI High resolution EPR spectra of ferrocenyl(nitrophenyl)ethylene anion-radicals
AU Pedulli, Gian Franco; Todres, Zori V.
CS Dip. di Chim. Org., Univ. degli Stud. di Bologna, Bologna, Italy
SO Journal of Organometallic Chemistry (1992), 439(2), C46-C48
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA English
AB The radical anions of the title compds., FcCH:CHC₆H₄R (Fc = ferrocenyl, R = 2-, 3-, and 4-NO₂), were generated in DMSO by treatment of the appropriate precursors with Me₃COK, and their high resolution EPR spectra were recorded. The spectroscopic parameters indicate that the unpaired electron is delocalized on the ferrocenyl cyclopentadienyl ring and to some extent on the iron atom in the ortho and para but not in the meta nitrophenyl derivs.

L7 ANSWER 39 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:81115 CAPLUS
DN 118:81115
TI The Wittig reaction in the generation of organometallic compounds containing alkenes as side groups
AU Miller, Edward J.; Weigelt, Carolyn A.; Serth, Judith A.; Rusyid, Rusydi; Brenner, Jeffery; Luck, Linda A.; Godlewski, Michael
CS Dep. Chem., State Univ. New York at Plattsburgh, Plattsburgh, NY, 12901, USA
SO Journal of Organometallic Chemistry (1992), 440(1-2), 91-101
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA English
OS CASREACT 118:81115
AB The Wittig reaction was identified as a viable route to transition metal monomers. It was used to synthesize $[\eta^5\text{-C}_5\text{H}_4(\text{CMe:CHR})]\text{Mn}(\text{CO})_3$ [R = H (68% yield), Me (60%), Et (51%), Pr (40%), Ph (46%)] from acetylcymantrene and the appropriate phosphorane at room temperature $[\eta^5\text{-C}_5\text{H}_4(\text{CMe:CHR})]\text{Fe}(\eta^5\text{-C}_5\text{H}_5)$ [R = H (81%), Me (77%), Et (36%), Pr (27%)] were prepared from acetylferrocene and phosphorane at room temperature $[\eta^5\text{-C}_5(\text{CH:CRR'})\text{H}_4]\text{Fe}(\eta^5\text{-C}_5\text{H}_5)$ [R, R' = H, H (79%); Me, H (69%); Et, H (48%); Pr, H (49%); Ph, H (80%); CHMe₂, H (73%); Me, Me (67%)] were produced from formylferrocene and phosphorane in refluxing benzene. E/Z Isomeric ratios were identified for alkenylcymantrenes and are consistent with past Wittig studies. The aldol reaction was identified as a side route in the Wittig reactions of acetylferrocene and phosphoranes. Carbomethoxyphosphoranes did not produce alkenes at room temperature with nonpolar solvents.

L7 ANSWER 40 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:59854 CAPLUS
DN 118:59854
TI Protophilic isotopic hydrogen exchange of 1-ferrocenyl-2-(nitrophenyl)ethylenes
AU Todres, Z. V.; Ermekov, D. S.

CS Inst. Organo-Elem. Compd. of the Russ. Acad. Sci., 28 Vavilov Str.,
Moscow, 117813 GSP-1, V-334, Russia
SO Journal of Organometallic Chemistry (1992), 439(1), C28-30
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA English
AB *cis*-1-Ferrocenyl-2-(4-nitrophenyl)ethylene enters into the protium/deuterium exchange in basic medium at the expense of hydrogens of the Ph ring, at ortho positions with respect of the nitro group. The homoarom. analog, 4-nitrostilbene, under the same conditions, undergoes isotopic exchange occurring exclusively at the vinylic CH fragment attached to the nitrophenyl group. The difference is eliminated as a result of the shift of the nitro group from position 4 into position 2 of the Ph ring: *cis*-1-ferrocenyl-2-(2-nitrophenyl)ethylene enters into H+/D+ exchange in the same manner as 4-nitrostilbene.

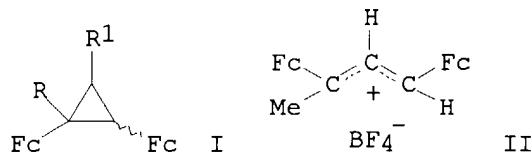
L7 ANSWER 41 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:592483 CAPLUS
DN 117:192483
TI Organometallic nonlinear optical polymers. 2. Synthesis of main-chain organometallic polymers and a structural study of ferrocene NLO-phores
AU Wright, Michael E.; Toplikar, Edward G.
CS Dep. Chem. Biochem., Utah State Univ., Logan, UT, 84322-0300, USA
SO Macromolecules (1992), 25(22), 6050-4
CODEN: MAMOBX; ISSN: 0024-9297
DT Journal
LA English
AB A detailed structural anal. of several ferrocene-based nonlinear optical-phores was done by x-ray diffraction. Structures were reported for (η 5-C5H5)[η 5-C5H4CH:C(CN)(R)]Fe (R = CO2Et, CN, 4-pyridyl, and 4-bromophenyl). Electron-withdrawing groups favored and controlled the planarity of the π -system. Through selective functionalization of the cyclopentadienyl rings of ferrocene, new monomers, namely, [η 5-C5H4CH2O(CH2)nOH][η 5-C5H4CH:C(CN)CO2Et]Fe (I) and [η 5-C5H4CH2O(CH2)nO2CCH2CN][η 5-C5H4CHO]Fe [n = 1 (II); n = 6 (III)], were prepared. Monomer I was suitable for Lewis acid catalyzed transesterification/polymerization using Ti(OBu)4, and II and III were appropriate for a Knoevenagel polycondensation. The transesterification polymerization resulted in formation of an intractable polymeric material of unknown structure. The homopolymn. of III by the Knoevenagel technique afforded the desired polymer, albeit in low mol. weight (.apprx.6800). The polymer was characterized by gel-permeation chromatog. and spectroscopic data. A major byproduct in the polymerization was the macrocyclic lactone produced from an intramol. Knoevenagel condensation. The lactone structure was confirmed by single-crystal x-ray diffraction.

L7 ANSWER 42 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:235814 CAPLUS
DN 116:235814
TI Regiochemistry of acetylation of ferrocenylarylethylenes
AU Kott, Kevin L.; McMahon, Robert J.
CS Dep. Chem., Univ. Wisconsin, Madison, WI, 53706, USA
SO Journal of Organic Chemistry (1992), 57(11), 3097-101
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 116:235814
AB The synthesis and Friedel-Crafts acetylation of a series of ferrocenylarylethylenes, C5H5FeC5H4CH:CH(C6H4X-p), (I, X = NO2, BR, NMe2) are described. Compds. I provide a direct comparison of the reactivity of ferrocene, olefin, and aryl functionalities. The regiochem. of substitution of these compds. depends on the nature of the aryl

substituent. Acetylation occurs predominantly at the olefin and the unsubstituted cyclopentadienyl ring; substitution does not occur at the aryl ring or at the substituted cyclopentadienyl ring. Reaction at the olefin is accompanied by olefin isomerization. With the strongly activating dimethylamino substituent, substitution at the unsubstituted cyclopentadienyl ring is slightly favored over substitution at the olefin. The regiochem. of olefin substitution suggests that a ferrocenyl substituent is better able to stabilize an adjacent pos. charge than a p-(dimethylamino)aryl substituent. With the bromine substituent, substitution at the olefin is slightly favored over substitution at the unsubstituted cyclopentadienyl ring. The nitro group is sufficiently deactivating that I (X = NO₂) fails to react under the conditions employed.

L7 ANSWER 43 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:179376 CAPLUS
DN 112:179376
TI Optical nonlinearities of organometallic structures: aryl and vinyl derivatives of ferrocene
AU Ghosal, Saswati; Samoc, Marek; Prasad, Paras N.; Tufariello, Joseph J.
CS Dep. Chem., State Univ. New York, Buffalo, NY, 14214, USA
SO Journal of Physical Chemistry (1990), 94(7), 2847-51
CODEN: JPCHAX; ISSN: 0022-3654
DT Journal
LA English
OS CASREACT 112:179376
AB With an objective to understand the nonlinear optical properties of organometallic structures, various aryl and vinyl derivs. of ferrocene were synthesized and their nonlinear optical properties were investigated by using degenerate four-wave mixing. The mol. second hyperpolarizability γ increases strongly with the length of the conjugated π -electron system. The results show that the effective conjugation is determined predominantly by the length of the aryl-vinyl system; the contribution from the ferrocenyl group is less significant. The d-d resonance of the metal in the ferrocene unit does not appear to make an important contribution to optical nonlinearity. The exptl. results on ferrocene are compared with those from a recent theor. study using semiempirical calcns. Although a qual. agreement with the theor. result is found, the exptl. value of γ determined in this paper is about 4 times larger. Possible sources of such discrepancies are discussed.
L7 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:21098 CAPLUS
DN 112:21098
TI Aminoalkylferrocene derivatives. (II). Reactions of palladium complex of N,N-diethylaminomethylferrocene with olefins
AU Zhang, Lun; Xiang, Jinfu; Wang, Shuangli; Wang, Jiying
CS Chem. Dep., Wuhan Univ., Wuhan, Peop. Rep. China
SO Gaodeng Xuexiao Huaxue Xuebao (1988), 9(10), 1074-6
CODEN: KTHPDM; ISSN: 0251-0790
DT Journal
LA Chinese
AB The synthesis of the palladium complex of N,N-diethylaminomethylferrocene, di- μ -chloro-bis[2-(diethylaminomethyl)ferrocenyl]dipalladium, and its reactions with styrene, Me propenoate, and 2-ferrocenylpropene were reported. The palladium complex and all the reaction products are 1,2-disubstituted ferrocene.
L7 ANSWER 45 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:529228 CAPLUS
DN 109:129228
TI Reaction of 1,2-diferrocenylcyclopropanes with trityl tetrafluoroborate

AU Klimova, E. I.; Pushin, A. N.; Sazonova, V. A.
CS Mosk. Univ., Moscow, USSR
SO Zhurnal Obshchey Khimii (1987), 57(10), 2336-42
CODEN: ZOKHA4; ISSN: 0044-460X
DT Journal
LA Russian
OS CASREACT 109:129228
GI



AB The reaction of cyclopropanes (E)-, (Z)-I ($R = H, Me$; $R1 = H, Me, Ph$; $Fc =$ ferrocenyl) with $Ph_3C^+BF_4^-$ was studied. Thus, treating I ($R = Me, R1 = H$) with $Ph_3C^+BF_4^-$ gave salt II. The reactions of the salts with $PhNMe_2$ and $MeMgI$ were also studied.

L7 ANSWER 46 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1987:477165 CAPLUS

DN 107:77165

TI Synthesis and electronic spectra of 1-aryl-2-[β -[m]ferrocenophenyl]ethylenes and 1-aryl-3-[β -[m]ferrocenophenyl]-2-propenones. Has the bridge a specific effect on the substituent dependent d-d transition band?

AU Toma, S.; Gaplovsky, A.; Elecko, P.; Gajda, V.

CS Dep. Org. Chem., Comenius Univ., Bratislava, 842 15, Czech.

SO Acta Facultatis Rerum Naturalium Universitatis Comenianae, Chimia (1985), 33, 157-63

CODEN: AFRCAQ; ISSN: 0524-2312

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

AB Title compds. I ($m = 3, 5$; X = a bond, CO; R = 4-OMe, H, 3-Cl, 4-cyano) were prepared and their electronic spectra recorded. The position of the d-d band depended on the substituent, but no specific effect of the bridge on its position was observed

L7 ANSWER 47 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1986:609145 CAPLUS

DN 105:209145

TI Chiral α -ferrocenylalkylamines

AU Herrmann, Rudolf; Huebener, Gerd; Siglmueller, Franz; Ugi, Ivar

CS Org.-Chem. Inst., Tech. Univ. Muenchen, Garching, 8046, Fed. Rep. Ger.

SO Liebigs Annalen der Chemie (1986), (2), 251-68

CODEN: LACHDL; ISSN: 0170-2041

DT Journal

LA German

OS CASREACT 105:209145

AB The preparation of chiral α -ferrocenylalkylamines by resolution of the racemates is described. In some cases, both of the enantiomers can be obtained with the aid of a single chiral reagent. The diastereoselective syntheses of α -ferrocenylalkylamines with 2 chiral centers take advantage of the kinetics and thermodn. of the reactions of α -ferrocenylalkyl carbocations. The amines thus prepared have been tested as chiral inducing templates in the synthesis of models of peptides by stereoselective 4-component condensation.

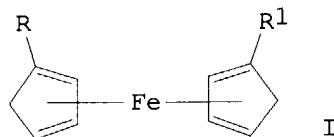
L7 ANSWER 48 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:523659 CAPLUS
DN 103:123659
TI Synthesis and electronic spectra of 1-aryl-2-ferrocenylethylenes
AU Toma, S.; Gaplovsky, A.; Elecko, P.
CS Fac. Nat. Sci., Komensky Univ., Bratislava, CS-842 15, Czech.
SO Chemical Papers (1985), 39(1), 115-24
CODEN: CHPAEG; ISSN: 0366-6352
DT Journal
LA English
AB Fourteen 1-aryl-2-ferrocenylethylenes $\text{FcCH:CHC}_6\text{H}_4\text{R}$ (Fc = ferrocenyl; R = H, halo, MeO , etc.) were synthesized from ferrocene and substituted phenylacetic acids. Those bearing electron-accepting groups were prepared by Wittig reaction from $\text{FcCH}_2\text{Ph}_3\text{P}^+ \text{I}^-$ iodide and aromatic aldehydes. Relationship between the electronic spectra, especially of the so-called d-d band at about 440 nm and the effect of substituent of the title products was investigated.

L7 ANSWER 49 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:488333 CAPLUS
DN 99:88333
TI Cyclophanes. Part 20. New link between cyclophane and ferrocene chemistry
AU El-Tamany, Sayed; Raulfs, Friedrich Wilhem; Hopf, Henning
CS Inst. Org. Chem., Tech. Univ. Braunschweig, Braunschweig, D-3300, Fed. Rep. Ger.
SO Angewandte Chemie (1983), 95(8), 631
CODEN: ANCEAD; ISSN: 0044-8249
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB The reaction of formylparacyclophane I with formylferrocene gave 33% II. Similarly, cyclophane III complexed with Fe to give IV.

L7 ANSWER 50 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:453922 CAPLUS
DN 99:53922
TI The synthesis and studies of several [2.2.2]ferrocenophane derivatives
AU Kasahara, Akira; Izumi, Taeko; Shimizu, Iwao; Oikawa, Tadashi; Umezawa, Hiroshi; Hoshino, Isao
CS Fac. Eng., Yamagata Univ., Yonezawa, 992, Japan
SO Bulletin of the Chemical Society of Japan (1983), 56(4), 1143-8
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Several ferrocenophanes I-III (RR₁ = bond; R = R₁ = E-H) were synthesized via the Ti-induced reductive coupling of the corresponding formyl compds. The transannular π -electronic interactions between the 2 chromophores were examined on the basis of the electron spectra.

L7 ANSWER 51 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1982:527772 CAPLUS
DN 97:127772
TI Synthesis and crystal and molecular structure of [E]-1-phenyl-2-ferrocenyl-1-nitroethene
AU Grzesiak, Elzbieta; Kaluski, Zygmunt; Skrzypczak-Jankun, Ewa; Ratajczak, Akeksander; Zmuda, Henryk
CS Inst. Chem., Adam Mickiewicz Univ., Poznan, 60-780, Pol.
SO Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences Chimiques (1981), 29(1-2), 31-9

DT CODEN: BAPCAQ; ISSN: 0001-4095
 LA Journal
 English
 AB The x-ray crystal structure of the title compound, prepared by condensation of formylferrocene with PhCH₂NO₂, indicated that the conformation is almost staggered. The rotation angle is 32.3(5)°.
 L7 ANSWER 52 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1982:217988 CAPLUS
 DN 96:217988
 TI Synthesis of organosilyl compounds containing the ferrocene nuclei
 AU Wu, Guanli; Liu, Shuqing; Liao, Zengkun
 CS Inst. Chem., Acad. Sin., Beijing, Peop. Rep. China
 SO Huaxue Xuebao (1982), 40(1), 67-72
 CODEN: HHHPA4; ISSN: 0567-7351
 DT Journal
 LA Chinese
 GI



AB I (R = SiEt₂CH:CH₂, R1 = H) was prepared from ferrocene (II), BuLi and ClSiEt₂CH:CH₂. I (R = R1 = SiR₂R₃2; R₂, R₃ = Me, Me; Bu, Bu; Ph, Me) were prepared from II, n-C₅H₁₁Na and R₂R₃2SiCl. I (R = R1 = CMeR₄OH; R₄ = PhCH₂, Bu, CH₂CH₂CH₂SiMe₃) were prepared from diacetylferrocene and R₄MgX (X = Cl, Br).
 L7 ANSWER 53 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1981:515713 CAPLUS
 DN 95:115713
 TI The electrophilic substitution of ferrocene by protonated carbonyl compounds
 AU Herrmann, Ruldolf; Ugi, Ivar
 CS Inst. Org. Chem., Tech. Univ. Muenchen, Garching, 8046, Fed. Rep. Ger.
 SO Tetrahedron (1981), 37(5), 1001-9
 CODEN: TETRAB; ISSN: 0040-4020
 DT Journal
 LA English
 AB Reaction of ferrocene with aldehydes and ketones in strongly acidic media gave α -ferrocenylalkyl carbenium ions which deprotonated to give ferrocenylethene derivs. or were trapped by mercaptans or amines to give α -ferrocenylalkylsulfones and -amines, resp. E.g., treatment of ferrocene with Me₃CCHO (Cl₃CCO₂H, FSO₃H, AcOH, under N₂, -10 to 0°, 20-45 min) gave the carbenium ion which, on addition of HSCH₂CO₂Me (0°, 15 min), gave 74% Me₃CCHRSCH₂CO₂Me (R = α -ferrocenyl). The reaction mechanisms are discussed.

L7 ANSWER 54 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1981:47448 CAPLUS
 DN 94:47448
 TI Stable carbocations. Part 22. Stereochemistry of the deprotonation of ferrocenylalkylum ions, and of the protonation of alkenylferrocenes
 AU Bunton, Clifford A.; Crawford, William; Cully, Norman; Watts, William E.

CS Dep. Chem., Univ. California, Santa Barbara, CA, 93106, USA
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and
Bio-Organic Chemistry (1972-1999) (1980), (10), 2213-17
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
AB In the absence of adverse steric effects, ferrocenylalkylum ions of type
FcC+RCH(Ph)Me (Fc = ferrocenyl) (R = H, Me, Ph) underwent preferential
exo-deprotonation on reaction with base. Similar exo-stereoselectivity
was associated with protonation of the resulting alkenes FcCR:C(Ph)Me (R as
before) in CF₃CO₂H.

L7 ANSWER 55 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1980:181324 CAPLUS
DN 92:181324
TI Use of two-phase systems in syntheses of ferrocene derivatives
AU Boev, V. I.; Dombrovskii, A. V.
CS Nezhin. Pedagog. Inst., Nezhin, USSR
SO Zhurnal Obshchey Khimii (1980), 50(1), 121-5
CODEN: ZOKHA4; ISSN: 0044-460X
DT Journal
LA Russian
OS CASREACT 92:181324
AB FcCH:CH₂, FcCH:CHPh and FcCH:CHCO₂R (I, Fc = ferrocenyl, R = Et, Pr, Bu)
were prepared by the Wittig and Horner reaction using a two-phase system.
Thus, treating FcCHO with (EtO)₂POCH₂CO₂R in presence of Bu₄NI in the
two-phase system CH₂Cl₂-50% NaOH gave I.

L7 ANSWER 56 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1979:611545 CAPLUS
DN 91:211545
TI Synthesis of [2]paracyclo[2]paracyclo[2](1,1')ferrocenophane derivatives
AU Kasahara, Akira; Izumi, Taeko; Shimizu, Iwao
CS Fac. Eng., Yamagata Univ., Yonezawa, 992, Japan
SO Chemistry Letters (1979), (9), 1119-22
CODEN: CMLTAG; ISSN: 0366-7022
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB The title compds. I (Z = CH:CH, C.tplbond.C) were prepared in 2.2, 15%
yields resp. by reaction of 1,1'-diiodoferrrocene with CH₂:CHC₆H₄CHO-p or
CH.tplbond.CC₆H₄CH(OEt)₂-p to give II in 55, 27% yields resp. which were
cyclized with TiCl₃-LiAlH₄.

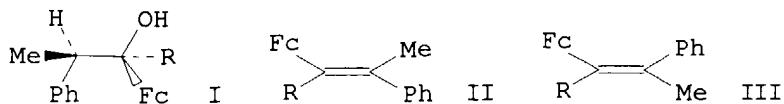
L7 ANSWER 57 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1978:597684 CAPLUS
DN 89:197684
TI Stereochemistry of metallocenes. 41. Ferrocenederivatives. 62.
Syntheses and stereochemistry of metalloceno cycloocta-1,5-dienes:
[2]orthocyclo[2](1,2)benchrotrenophane and -ferrocenophane,
[2.2](1,2)ferrocenophane
AU Benedikt, Michael; Schloegl, Karl
CS Inst. Org. Chem., Univ. Wien, Vienna, Austria
SO Monatshefte fuer Chemie (1978), 109(4), 805-22
CODEN: MOCMB7; ISSN: 0026-9247
DT Journal
LA English
AB The title compds. I, II and III were prepared for configurational and
conformational studies-mainly in comparison with cyclophanes of related
structures, such as [2.2]orthocyclophane (IV). Whereas I was accessible
in 1-step from IV and Cr(CO)₆, the ferrocenophanes II, III were prepared by
stepwise reaction sequence starting with a Wittig reaction: thereby

hydroxymethylated ferrocenyl Ph and diferrocenyl ethylenes were obtained in which (after hydrogenation to the corresponding ethanes) the CH₂OH groups were transformed into acetic acid residues. Subsequent ring closure and reduction of the cyclic ketones afforded the desired phanes, of which III was obtained as a 3:1 mixture of the trans and cis isomers. The configurational assignment was based mainly on the ¹H-NMR spectra. Conformational possibilities especially of III are briefly discussed and tentative conformation are assigned to the stereoisomers of III.

L7 ANSWER 58 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1978:529658 CAPLUS
DN 89:129658
TI Reactions of some ferrocenyl- and 2-thienylacetylenes
AU Siegel, Alan; Rausch, Marvin D.
CS Dep. Chem., Indiana State Univ., Terre Haute, IN, USA
SO Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry (1978), 8(3), 209-26
CODEN: SRIMCN; ISSN: 0094-5714
DT Journal
LA English
AB Addition reactions of RC.tplbond.CR1 [R = ferrocenyl, R1 = Ph, 2-thienyl, ferrocenyl; R = Ph, R1 = 2-thienyl (I)] including reactions with acyl chlorides and POC₃ to add HCl, hydration to add H₂O, and addition of BuLi gave olefins. Thus, FcC.tplbond.CPh (II) and AcCl-AlCl₃ gave 8-18% cis- and trans-FcClC:CHPh (Fc = ferrocenyl). Also, treatment of I and II with tetraphenylcyclopentadienone gave 78% 2-(pentaphenylphenyl)thiophene and 52% pentaphenylphenylferrocene, resp.

L7 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1978:170214 CAPLUS
DN 88:170214
TI The reaction of ortho-palladated ferrocene complexes with olefins
AU Izumi, Taeko; Endo, Kazuyoshi; Saito, Osamu; Shimizu, Iwao; Maemura, Mitsugi; Kasahara, Akira
CS Fac. Eng., Yamagata Univ., Yonezawa, Japan
SO Bulletin of the Chemical Society of Japan (1978), 51(2), 663-4
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Ortho palladation products of (dimethylaminomethyl)ferrocene (I) and 2-pyridylferrocene (II) were treated with various olefins under mild conditions to give a variety of unusual 1,2-disubstituted ferrocene derivs., e.g., III (R = H, Me; R1 = Ph, CO₂Et, CO₂Me, CN, COMe, COPh) and IV (R = COMe, COPh).

L7 ANSWER 60 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1978:136007 CAPLUS
DN 88:136007
TI Stereochemistry of proton transfer to alkenylferrocenes and of deprotonation of ferrocenylalkylum ions
AU Bunton, Clifford A.; Crawford, William; Watts, William E.
CS Dep. Chem., Univ. California, Santa Barbara, CA, USA
SO Tetrahedron Letters (1977), (42), 3755-8
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
GI



AB Alcs. I (R = H, Ph; Fc = ferrocenyl) on sequential heterolysis (CF₃CO₂H), equilibration, and quenching (Na₂CO₃) gave a mixture of alkenes II and III. Similar treatment of I (R = Me) gave mainly CH₂:C(Fc)CHMePh and small amts. of II (R = Me) and III (R = Me). Studies of the ratios of II to III obtained by immediate quenching (Na₂CO₃ or KOCMe₃/HOCMe₃) of the cations prepared by dissolving II in cold CF₃CO₂H showed that exo deprotonation and protonation were preferred. Similar protonation was observed for systems in which Fc-C⁺ rotation is prevented.

L7 ANSWER 61 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1978:89812 CAPLUS

DN 88:89812

TI A convenient synthesis of ferrocenylalkenes

AU Chen, S. C.; Lee, C. C.; Sutherland, R. G.

CS Dep. Chem. Eng., Univ. Saskatchewan, Saskatoon, SK, Can.

SO Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry (1977), 7(6), 565-9

CODEN: SRIMCN; ISSN: 0094-5714

DT Journal

LA English

AB Acylation of ferrocene with RCl (R = Ac, EtCO, Me₂CHCO, PhCH₂CO, Ph₂CHCO) gave RFc (Fc = ferrocenyl), which, reduced with LiAlH₄ and treated with 20% HCl gave 75-89% R₁Fc (R₁ = H₂C:CH, trans-MeCH:CH, Me₂C:CH, trans-PhCH:CH, Ph₂C:CH).

L7 ANSWER 62 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1977:439634 CAPLUS

DN 87:39634

TI Palladium-catalyzed reaction of olefins and acetylenes with iodoferrocenes

AU Kasahara, Akira; Izumi, Taeko; Maemura, Mitsugi

CS Fac. Eng., Yamagata Univ., Yonezawa, Japan

SO Bulletin of the Chemical Society of Japan (1977), 50(4), 1021-2

CODEN: BCSJA8; ISSN: 0009-2673

DT Journal

LA English

AB Iodoferrocene (I) reacts readily with olefinic compds. in the presence of Pd(OAc)₂ to produce alkenylferrocene derivs. In the presence of a copper(I) iodide and Pd complex, I also reacts with RC.tplbond.CH (R = H, Ph) to afford diferrocenylacetylene and ferrocenylphenylacetylene, resp.

L7 ANSWER 63 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1976:179179 CAPLUS

DN 84:179179

TI Aromatic substitution of olefins. XXV. Reactivity of benzene, naphthalene, ferrocene, and furan toward styrene, and the substituent effect on the reaction of monosubstituted benzenes with styrene

AU Fujiwara, Yuzo; Asano, Ryuzo; Moritani, Ichiro; Teranishi, Shiichiro

CS Fac. Eng. Sci., Osaka Univ., Toyonaka, Japan

SO Journal of Organic Chemistry (1976), 41(10), 1681-3

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

AB The relative reactivity of aromatic compds. toward PhCH:CH₂ in the presence of Pd(OAc)₂, examined by competitive reactions, increased in the order: benzene <naphthalene <ferrocene <furan. Partial rate factors for the

reaction PhR (R = Me, Et, OMe, Cl, NO₂) with PhCH:CH₂ to give the trans-RC₆H₄CH:CHPh were determined and the substituent effects were discussed. The reaction involved an electrophilic attack of Pd²⁺ on the aromatic ring to form an aromatic Pd σ complex.

L7 ANSWER 64 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1975:140278 CAPLUS
DN 82:140278
TI Formation of ethynylferrocenes in reactions of sterically crowded acetylferrocenes with a Grignard reagent
AU Abram, T. S.; Watts, W. E.
CS Sch. Phys. Sci., New Univ. Ulster, Coleraine, UK
SO Journal of Organometallic Chemistry (1975), 86(1), 109-18
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Acetylferrocenes bearing a bulky 2-alkyl substituent (e.g. I, R = Ac) react with Me₂CHMgBr to give enolate salts which are converted into ethynylferrocenes (e.g. I, R = C.tplbond.CH) by thermally induced elimination.

L7 ANSWER 65 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1974:70933 CAPLUS
DN 80:70933
TI Metallocenes. IX. Reduction of ketones by triphenyltin hydride and acetyl chloride. Selective reduction of 1,1'-diacylferrocenes
AU Patin, Henri; Dabard, Rene
CS Lab. Chim. Org. E, Univ. Rennes, Rennes, Fr.
SO Bulletin de la Societe Chimique de France (1973), (9-10, Pt. 2), 2756-9
CODEN: BSCFAS; ISSN: 0037-8968
DT Journal
LA French
AB Reduction of FcCOR (Fc = ferrocenyl; R = Me, Et, Pr, Ph, PhCH₂, 2-thienyl) by Ph₃SnCl-AcCl gave 40-90% FcCH₂R, the yields decreasing with increasing size of R. A similar selectivity was found with 1,1'-diacylferrocenes; single reduction to give 1,1'-acyl(alkyl)ferrocenes always exceeded double reduction to give 1,1'-dialkylferrocenes. The postulated acetate intermediate was isolated for 1-(phenylacetyl)-1'-(2-thenoyl)ferrocene.

L7 ANSWER 66 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1972:153902 CAPLUS
DN 76:153902
TI Palladium-catalyzed ferrocenylation of olefins
AU Kasahara, Akira; Izumi, Taeko; Saito, Genji; Yodono, Minoru; Saito, Ryuichi; Goto, Yoshiaki
CS Fac. Eng., Yamagata Univ., Yonezawa, Japan
SO Bulletin of the Chemical Society of Japan (1972), 45(3), 895-900
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
AB Ferrocenylpalladium chloride, prepared in situ from chloro-mercuriferrocene and lithium chloropalladite, reacts readily with various olefins to produce alkenylferrocene derivs. Enol esters and allylic alcs. also react to form (2-oxoalkyl)-and (3-oxoalkyl)-ferrocene derivs. The synthesis of 1,1'-dialkenylferrocene de-derivs. from 1,1'-bis(chloromercuri)ferrocene, olefins and Pd salt is also reported. The reaction may proceed by means of a catalytic amount of the metal salt and by the aid of CuCl₂; it provides an extremely convenient method for the synthesis of a wide variety of ferrocene derivs.

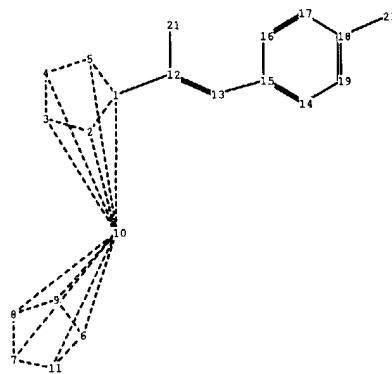
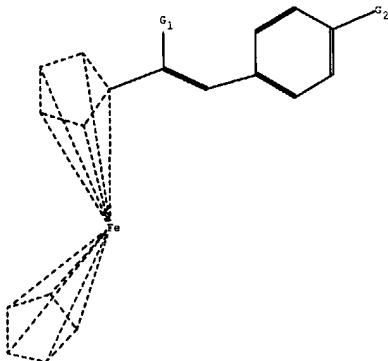
L7 ANSWER 67 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1972:14691 CAPLUS
DN 76:14691
TI Aromatic substitution of olefins. XVII. Reactions of ferrocene with olefins in the presence of palladium(II) salts
AU Asano, Ryuzo; Moritani, Ichiro; Sonoda, Akio; Fujiwara, Yuzo; Teranishi, Shiichiro
CS Fac. Eng. Sci., Osaka Univ., Osaka, Japan
SO Journal of the Chemical Society [Section] C: Organic (1971), (22), 3691-2
CODEN: JSOOAX; ISSN: 0022-4952
DT Journal
LA English
AB Ferrocene reacted with styrene, CH₂:CHCN, CH₂:CHCO₂Me, acrolein, and CH₂:CHOBu in the presence of Pd(OAc)₂ to give alkenylferrocenes; the reactivity of the olefin is increased by electron-withdrawing groups.

L7 ANSWER 68 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1970:531114 CAPLUS
DN 73:131114
TI Aromatic substitution of olefins. Reaction of ferrocene with styrene in the presence of palladium(II) acetate
AU Asano, Ryuzo; Moritani, Ichiro; Fujiwara, Yuzo; Teranishi, Shiichiro
CS Fac. Eng. Sci., Osaka Univ., Toyonaka, Japan
SO Journal of the Chemical Society [Section] D: Chemical Communications (1970), (20), 1293
CODEN: CCJDAO; ISSN: 0577-6171
DT Journal
LA English
AB trans- α -Styrylferrocene was prepared in 20% yield by treatment of ferrocene with styrene in the presence of Pd(OAc)₂, by catalytic substitution of a H in the cyclopentadienyl group.

L7 ANSWER 69 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1970:414960 CAPLUS
DN 73:14960
TI Friedel-Crafts acetylation of ferrocene analogs of benzophenone, diphenylmethane, and stilbene
AU Toma, S.; Kaluzayova, E.
CS Fac. Nat. Sci., Komensky Univ., Bratislava, Czech.
SO Chemicke Zvesti (1969), 23(7), 540-52
CODEN: CHZVAN; ISSN: 0366-6352
DT Journal
LA English
AB The Friedel-Crafts acetylations of benzophenone (I), diphenylmethane (II), and stilbene (III) ferrocene analogs were studied to determine their reactivity. In all cases, ferrocenyl aryl ketone substitution occurred in the unsubstituted cyclopentadiene ring of ferrocene. In the I analog, but not in the II or III, ferrocene was more reactive than thiophene and furan. The results confirmed the conclusions of Schloegl (1964).

L7 ANSWER 70 OF 70 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1969:3087 CAPLUS
DN 70:3087
TI Studies in ferrocene derivatives. V. Synthesis and nuclear magnetic resonance spectra of some ferrocenyl ethylenes
AU Horspool, William M.; Sutherland, Ronald G.
CS Univ. Dundee, Dundee, UK
SO Canadian Journal of Chemistry (1968), 46(22), 3453-6
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA English

AB Ferrocenylethylenes are readily synthesized from acylferrocenes and the appropriate triphenylphosphorane in dimethyl sulfoxide. Details of the N.M.R. spectra of 12 ethylenes were recorded.



chain nodes :

12 13 21 23

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 14 15 16 17 18 19

chain bonds :

1-12 12-13 12-21 13-15 18-23

ring bonds :

1-2 1-5 1-10 2-3 2-10 3-4 3-10 4-5 4-10 5-10 6-9 6-11 6-10
7-8 7-11 7-10 8-9 8-10 9-10 10-11 14-15 14-19 15-16 16-17

17-18 18-19

exact/norm bonds :

1-2 1-5 1-10 2-3 2-10 3-4 3-10 4-5 4-10 5-10 6-9 6-11 6-10
7-8 7-11 7-10 8-9 8-10 9-10 10-11 12-21 18-23

exact bonds :

1-12 12-13 13-15

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19

G1: H, CH3, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu

G2: H, CH3, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, X

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom
18:Atom 19:Atom 21:CLASS 23:CLASS